

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION

MOV-ology LLC,

Plaintiff,

v.

BigCommerce Holdings, Inc.,
BigCommerce Pty. Ltd., and
BigCommerce, Inc.,

Defendants.

Civil Action No. 6:22-cv-00084-ADA

Jury Trial Demanded

MOV-ology's Responsive Claim Construction Brief

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1. Introduction

The asserted patents generally relate to systems and methods for retrieving data from incomplete or abandoned electronic forms and using the retrieved data to identify the consumer who accessed the electronic form. The specifications provide ample detail about how to implement the inventions claimed in the patents and identify specific computer technologies to solve the problems identified by the patents, which arise only on the internet. The disputed claim terms all have a plain and ordinary meaning to a person of ordinary skill in the art (“POSITA”).

BigCommerce asks the Court to enter constructions that do not align with the plain meaning of the claims and further asks the Court to find indefinite multiple limitations that have clear meaning in the intrinsic record or to a POSITA. BigCommerce bases much of its analysis on the declaration of its expert, Dr. Tal Lavian. But Dr. Lavian’s opinions should carry no weight because he lacks experience in MOV-ology’s field. His opinions about what a POSITA would or would not have understood reflect his own lack of experience in and study of these technologies. The Court should thus construe all disputed terms according to their plain and ordinary meaning.

2. The Asserted Patents

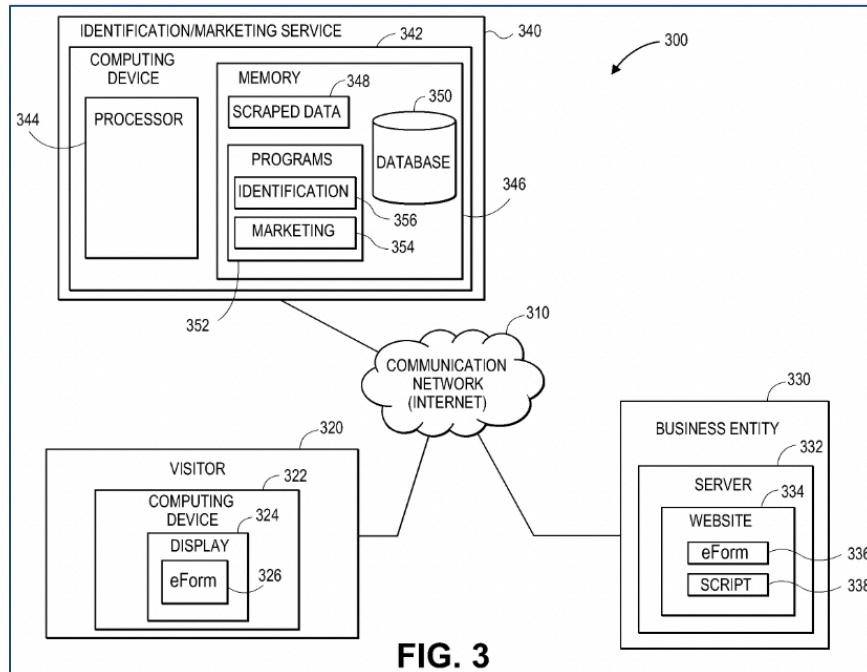
Founded in 2011 as MOV Digital Media, Inc., MOV-ology has spent the last decade developing and commercializing its proprietary Capture® software. As recognition of these innovations, MOV-ology founders Tom Ling and Peter Norton have obtained several patents, including U.S. Patent Nos. 9,286,282 (“’282 patent”) and 10,769,358 (“’358 patent”).

The ’282 and ’358 patents both claim priority to U.S. Provisional Appl. No. 61/908,349, filed November 25, 2013, and share a common specification. The inventors explained that the inventions claimed by the ’282 and ’358 patents allow businesses to track and identify

consumers who do not complete their interactions with electronic forms on a website, as well as collect data about how consumers interact with and withdraw from a website's electronic forms:

The present invention comprises a computer-implemented identification and marketing service that identifies consumers or website visitors that fail to complete an electronic form and permits marketing, such as targeted or personalized marketing, to these visitors. The identification and marketing service markets or remarkets in real time or approximately real time to the website visitors and tracks the website visitors as they access the electronic forms. The identification and marketing service advantageously enables business entities to reach lost consumers with marketing and enticements to induce the consumer to not only complete the electronic form, but to become a repeat customer. Further, the identification and marketing service provides the business entities with reports in real time or near real time showing what the visitors are choosing and abandoning.

ECF No. 42-1 at 3:41-55. Figure 3 shows “an embodiment of a system that identifies website visitors using data scraped from visitor accessed electronic forms available on the website”:



Id. at Fig. 3. The specification lists examples of eForms 326 and 336 as “registration forms, survey forms, marketing research forms, application forms, questionnaires, and the like.” *Id.* at 6:56-59. And the specification lists several ways to configure software to retrieve data from eForms, such as “JavaScript®, Perl®, REXX®, and Tcl/Tk®.” *Id.* at 7:55 to 8:2.

3. Claim Construction Analysis

The following table shows the claims currently asserted by MOV-ology in this action.

The claim numbers appearing in **orange** have disputed terms, while the **green** numbers do not:

Asserted Patent	Asserted Independent Claim	Asserted Dependent Claims
9,286,282	1	2, 3, 4
	9	10, 11
10,768,358	1	2, 3, 4
	17	18, 19, 20

3.1. “Product Feed” and “Payment Gateway” ('282 Patent, Claims 3, 4, 11, 12; '358 Patent, Claims 3, 4, 18)

BigCommerce challenges four dependent claim limitations on grounds that the terms “product feed” and “payment gateway” would not inform a POSITA about these claims’ scope.

Term	Claims	Plaintiff's Proposal	Defendants' Proposal
“wherein the data is obtained from the abandoned electronic form without a product feed”	'282 patent, Claims 3, 11	Plain and ordinary meaning	Indefinite
“wherein the data is obtained from the incomplete electronic form without a product feed”	'358 patent, Claim 3		
“wherein the electronic form does not include a payment gateway”	'282 patent, Claims 4, 12		
“wherein the incomplete electronic form does not include a payment gateway”	'358 patent, Claims 4, 18		

3.1.1. The Specification Does Not Confuse These Terms' Plain Meaning

BigCommerce asks the Court to find both terms indefinite because the specification ostensibly does not define them. *See ECF 42-1 (“Opening Br.”) at 4-6.*¹ But failure to define a term in the specification does not make it indefinite. The patent need only apprise, “with reasonable certainty, those skilled in the art about the scope of the invention.” *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377, 1382-84 (Fed. Cir. 2015) (rejecting indefiniteness arguments where the specification did not define the term). “The failure to define the term is, of course, not fatal, for if the meaning of the term is fairly inferable from the patent, an express definition is not necessary” *Bancorp Servs. L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (asking, “even in the absence of any express definitions,” whether the term’s meaning “is reasonably clear”); *see also Sw. Efuel Network, L.L.C. v. Transaction Tracking Techs., Inc.*, No. 2:07-cv-311-TJW, 2009 U.S. Dist. LEXIS 103395, at *19 (E.D. Tex. Oct. 23, 2009) (citing cases) (finding terms not defined in specification not indefinite, as a “claim term is not indefinite solely because the term presents a difficult claim construction issue”); *Lego Sys. A/S v. Rubicon Commc’ns, LP*, No. 3:15-cv-000823 (VLB), 2017 U.S. Dist. LEXIS 159158, *38-41 (D. Conn. Sept. 27, 2017) (finding term missing from specification not indefinite); *Takeda Pharm. Co. v. Mylan Inc.*, No. 13-cv-04001-LHK, 2014 U.S. Dist. LEXIS 159527, at *61 (N.D. Cal. Nov. 11, 2014) (finding term not in specification not indefinite).

BigCommerce concedes that the specification describes embodiments where “the eForm 336 is any electronic form that does not have a payment gateway” or “[t]he script embedded on the webpages comprising the eForm 326, 336 advantageously scrapes data from the eForm 326,

¹ BigCommerce also argues these terms “are unclear in the context of the claim language.” Opening Br. at 3-4. This assertion confuses claim construction with an enablement challenge, and in any case does not bear on whether these terms have a plain and ordinary meaning, or any meaning that reasonably informs a POSITA of the claim scope.

336 without a product feed, and is easy to install and update.” *E.g.*, ECF No. 42-1 at 2:8-9, 2:36-39, 6:50-59, 7:66 to 8:2. BigCommerce also acknowledges that the specification gives examples of web forms, including those lacking a product feed or payment gateway:

The electronic form or eForm **336** comprises a computer program version of a paper form that is accessible from webpages, mobile devices, portals, software applications, and the like. In an embodiment, the eForm **336** does not have a payment gateway and permits online entry of data. In another embodiment, the eForm **336** is any electronic form that does not have a payment gateway. Examples of electronic or computer-generated forms **336** are registration forms, survey forms, marketing research forms, application forms, questionnaires, and the like.

Id. at 6:50-59 (emphasis added). BigCommerce feigns confusion over whether these examples describe forms with or without a payment gateway or product feed. *See* Opening Br. at 5-6. But BigCommerce asks the wrong question. The specification clarifies the types of electronic forms that could constitute eForm 336. Whether those forms fall within an embodiment without a payment gateway or product feed depends on whether instances of those forms relate to making a payment or obtaining product information. “Payment gateway” and “product feed” have plain and well-known meanings to POSITAs and those working in ecommerce technologies in the early-to-mid 2010s, like Messrs. Ling and Norton. *See generally* Ex. A (Norton Decl.), ¶¶ 7-10.

3.1.2. Intrinsic Evidence Points to the Meaning of “Payment Gateway”

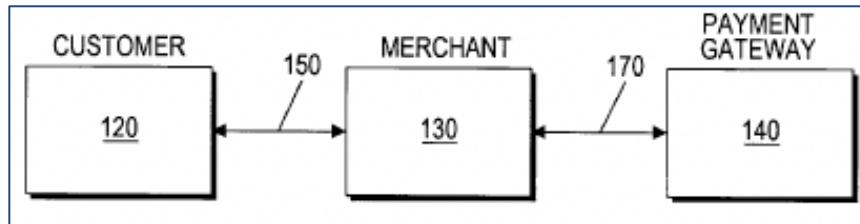
Notwithstanding the dubious merits of BigCommerce’s argument that the specification of the ’282 or ’358 patents does not define these terms, the references cited by the Examiner that form part of the intrinsic record of the asserted patents point in their disclosures to multiple discussions of “payment gateway” that reinforce the term’s plain meaning.

To illustrate, one of the four references cited by the Examiner and listed on the face of the ’282 patent is U.S. Patent Appl. Pub. No. 2005/0278321 (“Teeter”). *See* ECF No. 42-1 at 1. The

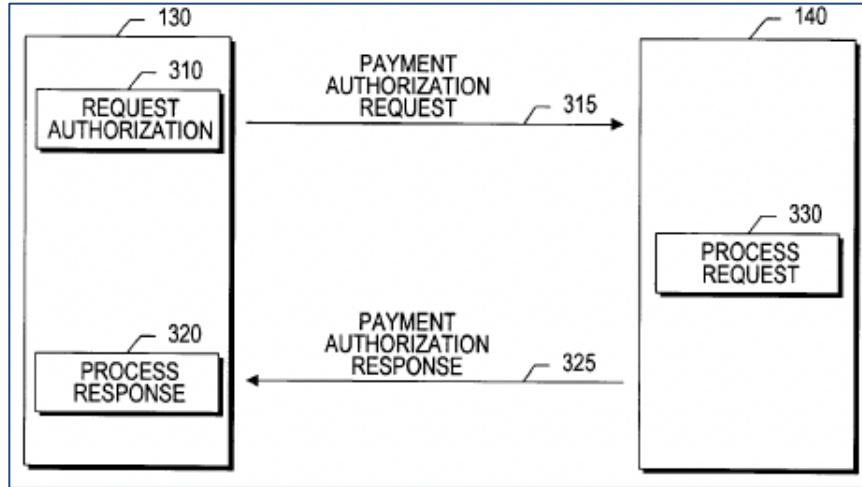
first reference during prosecution by Teeter is U.S. Patent No. 5,960,411, titled “Method and system for placing a purchase order via a communications network.” *See Ex. B at 1.* That patent survived *ex parte* reexamination and cites on its face U.S. Patent No. 5,983,208 (“Haller”), titled “System, method, and article of manufacture for handling transactions results in a gateway payment architecture utilizing a multichannel, extensible, flexible architecture.” *See Ex. C, cited in Ex. D at 3.* Haller defines payment gateway consistent with its plain and ordinary meaning:

FIG. 1B depicts an overview of the present invention. Customer computer system **120** is in communication with merchant computer system **130**. The customer-merchant session **150** operates under a general-purpose secure communication protocol such as the SSL protocol. Merchant computer system **130** is additionally in communication with payment gateway computer system **140**. A payment gateway is a system that provides electronic commerce services in support of a bank or other financial institution, and that interfaces to the financial institution to support the authorization and capture of transactions. The customer-institution session **170** operates under a variant of a secure payment technology such as the SET protocol, as described herein, referred to as Merchant-Originated Secure Electronic Transactions (“MOSET”), as is more fully described herein.

Ex. C at 13:18-22 (emphasis added). Figure 1B of Haller shows one embodiment:

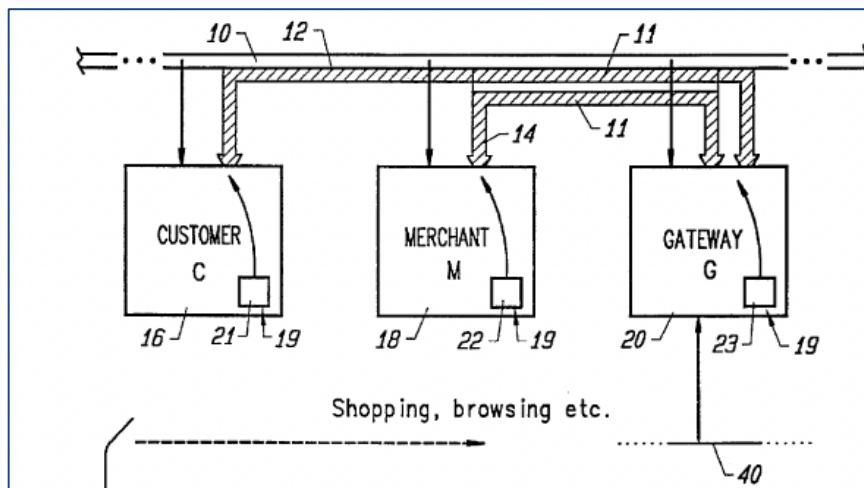


Id. at Fig. 1B. In a preferred embodiment showing the interaction between a merchant system and a payment gateway in more detail, Figure 3 “depicts an overview of the method of securely supplying payment information to a payment gateway in order to obtain payment authorization”:



Ex. C at Fig. 3; *see also id.* at Fig. 9 (depicting a preferred embodiment for “securely supplying payment capture information to a payment gateway”).

Haller was no outlier. As another example, the intrinsic record of U.S. Patent Appl. Pub. No. 2003/0144925, which the Examiner cited during prosecution of the '282 patent, disclosed U.S. Patent No. 5,671,279 (“Elgamal”) in an information disclosure statement. *See generally* Ex. E, *cited in* Ex. F at 2. Like Haller, Elgamal discloses an “electronic payment protocol” where the “primary parties are the Customer (buyer), the Merchant (seller), and the payment gateway (representing the Acquiring bank.)” Ex. E at 3:37-41. Elgamal’s Figure 1 mirrors Haller:



Ex. E at Fig. 1 (excerpted).

For those involved in developing ecommerce technology, the intrinsic record of the '282 patent's cited references confirms even from a cursory inspection that "payment gateway" had a well understood plain meaning going back to the 1990s. MOV-ology's use of that term as a negative limitation in two dependent claims does not render those claims indefinite.

3.1.3. "Payment Gateway" and "Product Feed" Have Meaning to a POSITA

BigCommerce largely shoulders its burden to show that these ubiquitous terms in the ecommerce world would have been so confusing to a POSITA at the time of the invention as to render the claims indefinite on its expert, Dr. Lavian. *See* Opening Br. at 4-6. But the Court should give no weight to these opinions because Dr. Lavian has no demonstrated experience or study in digital marketing or ecommerce as a practitioner or an expert consultant.

As a practitioner, Dr. Lavian's declaration touts that, while Messrs. Ling and Norton developed MOV-ology's ecommerce technology in the early to mid 2010s, Dr. Lavian directed his attention elsewhere: to "the software design and development of a visual interactive voice response system for smartphones and mobile devices." *See* ECF No. 42-6 (Lavian Decl.), ¶ 9. When his company rebranded in 2016, Dr. Lavian "facilitated the design, architectural development, and implementation of a cloud data center for connecting any smartphone user to any company and service by digitizing interactive voice systems and exposing them through cloud-service application programming interfaces to other applications." *Id.*, ¶ 10. During the invention and subsequent prosecution of MOV-ology's patents, Dr. Lavian's work focused on mobile technologies having nothing to do with ecommerce or digital marketing.

Dr. Lavian's consulting work confirms why he apparently does not know the vocabulary Messrs. Ling and Norton and their contemporaries readily understood. Since 2008, Dr. Lavian has provided "consulting and expert services in network communications, telecommunications,

internet protocols, and smartphone mobile wireless devices.” *Id.*, ¶ 8. As an expert, he has “testified in over 80 depositions on topics such as network communications and telecommunications, including Internet protocols, streaming media, and mobile wireless technologies.” *Id.*, ¶ 17. As an academic researcher, Dr. Lavian has focused on communications technologies like “network and server orchestration, Network resource orchestration for Web services workflows, and Packet capturing and forwarding service on IP and Ethernet.” *Id.*, ¶ 18.

All in all, Dr. Lavian has not studied or worked in the spaces where a POSITA would have studied or worked at the time of the invention of the ’282 and ’358 patents. The Court should not credit feigned ignorance about straightforward terms to ecommerce developers that have plain language meanings like a feed containing products or a gateway for payments, let alone well understood meanings to those working in this space at the time.

MOV-ology Co-Founder and CIO Peter Norton, a named inventor on both asserted patents, even before co-founding MOV-ology had 10 years’ experience in digital marketing at Samsung, IBM-owned Silverpop, StrongMail, and as a consultant. Ex. A, ¶¶ 2, 3. In these roles, he studied software engineering and learned to write software for ecommerce and digital marketing applications. *See id.*, ¶ 3. Mr. Norton first learned of payment gateways and product feeds in the late 2000s, before co-founding MOV-ology, through his consulting arrangements. *See id.*, ¶¶ 7-8. He helped clients build and upgrade payment gateways and product feeds on their websites before co-founding MOV-ology. *See id.* At MOV-ology, Mr. Norton and his co-founder and co-inventor, Tom Ling, first discussed payment gateways and product feeds with potential clients at the Consumer Electronics Show in Las Vegas in 2012. *See id.*, ¶ 9. Mr. Norton recalls that his team commonly used these terms without confusion about their meaning. *See id.*, ¶ 10.

Should the Court doubt whether “payment gateway” and “product feed” have their obvious plain meanings, the Court should disregard Dr. Lavian’s opinion as not based on relevant experience at the time of these inventions and should instead consider Mr. Norton’s actual experience and testimony based on his work developing the patented technology.

3.2. “Incomplete” ('358 Patent, Claims 1-4 and 17-20)

BigCommerce wrongly claims the '358 patent “uses the terms ‘incomplete’ and ‘abandoned’ synonymously” and construes “incomplete” as “abandoned.” Opening Br. at 6-7.²

Term	Claims	Plaintiff’s Proposal	Defendants’ Proposal
“incomplete”	'358 patent, Claims 1-4, 17-20	Plain and ordinary meaning	“abandoned”

3.2.1. The Specification Treats “Incomplete” and “Abandoned” Differently

The first portion of the specification BigCommerce quotes confirms that “incomplete” and “abandoned” mean different things: “the identification and marketing service 212 scrapes the data 214 from the incomplete *and/or* abandoned eForms 206.” ECF No. 42-2 at 5:58-60 (emphasis added), *quoted in* Opening Br. at 6. Anyone who has read a contract written by a lawyer knows “and/or” means whichever of “and” or “or” gives the broadest meaning, usually in the disjunctive. The Patent Office agrees, finding that “‘and/or’ covers embodiments having element A alone, element B alone, or elements A and B taken together.” *E.g., Ex parte Gross*, Appeal 2011-004811, Decision on Appeal at 4 (P.T.A.B. Nov. 30, 2006). The Patent Office’s findings also confirm that “and/or” means two *different* elements, “A” and “B”. *See id.*

² BigCommerce also identifies a single copy/paste error in MOV-ology’s 100+ pages of preliminary infringement contention claim charts, *see* Opening Br. at 7. MOV-ology will correct this error when it next updates its contentions. MOV-ology otherwise elects not to distract from the substantive issues for the Court’s determination with such trivial “gotcha” arguments, which only bely BigCommerce’s lack of substantive support for its unreasonable claim constructions.

Allowing for the identification and marketing service 212 to scrape data 214 from the incomplete eForm 206 *or* the abandoned eForm 206 means an incomplete eForm and an abandoned eForm are not the same thing. A disjunctive reading accords with the lay meaning of the terms incomplete and abandoned: something incomplete is unfinished or has empty parts, while something abandoned may or may not have empty parts but has been left alone. In the context of ecommerce technology, a user could complete a form but abandon it—*e.g.*, by leaving that browser tab open without further action or closing a browsing session—and a user could also complete and submit an incomplete form—*e.g.*, one with missing fields. In other words, a POSITA would have understood that eForms can be incomplete, abandoned, or both.

3.2.2. Construing “Incomplete” and “Abandoned” to Have Synonymous Meanings Would Render Claim 19 Superfluous

BigCommerce argues that “incomplete” means “abandoned” because Claim 19 of the ’358 patent discloses “determining when the incomplete electronic form has been abandoned by the user.” Opening Br. at 6-7. BigCommerce reasons that “[t]his determination step of Claim 19 presumes that the incomplete form of Claim 17 has likewise been abandoned.” *Id.* at 7.

The inference from this that “an incomplete form is an abandoned form” is facially nonsensical. *Id.* If “incomplete” and “abandoned” meant the same thing, the conditional “when the incomplete electronic form has been abandoned by the user” could never matter because every incomplete form would also necessarily be abandoned. Claim 19 requires a “determining” step *after* a form qualifies as incomplete—“the incomplete electronic form”—that a user has abandoned the incomplete form. *See* ECF No. 42-2 at 22:15-17. For that “determining” step to occur, incomplete forms that are not also abandoned must exist. If all incomplete forms are abandoned, Claim 19 discloses no more than Claim 17. BigCommerce’s proposed construction would improperly read any narrowing or further subject matter out of dependent Claim 19 and

render Claim 19 superfluous. *See, e.g., Ajinomoto Co. v. Int'l Trade Comm'n*, 932 F.3d 1342, 1351 (Fed. Cir. 2019) (“When different words are used in separate claims, they are presumed to have different meanings.” (quoting *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012))). “Incomplete” and “abandoned” have different meanings, and BigCommerce’s contrary thesis should be rejected.

3.3. “Computer Hardware Configured to . . .” (’282 Patent, Claim 9)

BigCommerce asks the Court to construe Claim 9 of the ’282 patent under § 112, ¶ 6 and then find the claim indefinite for lack of corresponding structure. *See* Opening Br. at 8-12.

Term	Claims	Plaintiff’s Proposal	Defendants’ Proposal
“computer hardware configured to determine that an electronic form accessed by a user has been abandoned by the user”			Means-plus-function under § 112, ¶ 6
“computer hardware configured to obtain data from the abandoned electronic form with the embedded computer-executable instructions by building a data structure based on the abandoned electronic form and parse the data structure to obtain the at least one HTML element”	'282 patent, Claim 9	Plain and ordinary meaning	Indefinite

Under 35 U.S.C. § 112(f), “Congress struck a balance in allowing patentees to express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function, while placing specific constraints on how such a limitation is to be construed, namely, by restricting the scope of coverage to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347-48 (Fed. Cir. 2015) (citing *Northrop Grumman Corp. v. Intel Corp.*, 325 F.3d 1346, 1350 (Fed. Cir. 2003)).

Generally, patent terms are construed without reference to the special provisions of § 112(f). Indeed, there is a presumption that terms that do not use the word “means” are not subject to the means-plus-function claiming under § 112(f). *Williamson*, 792 F.3d at 1348-49. To overcome this presumption, a party must show that “the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Id.* at 1349. Only if that presumption is overcome would the specialized rules apply here because none of the disputed terms use “means” terminology. If the presumption is overcome, “construction of a means-plus-function limitation includes two steps. First, the court must determine the claimed function. Second, the court must identify the corresponding structure in the written description of the patent that performs the function.” *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1332 (Fed. Cir. 2006) (internal citation omitted).

3.3.1. Claim 9 of the ’282 Patent Does Not Require § 112, ¶ 6 Construction

The ’282 patent’s specification provides a robust description of the hardware, interfaces, and underlying processing that the inventors used to implement the CONSUMER-ology service and equivalent systems that could be used by others to perform the same functions. The hardware and interfaces depicted in the ’282 patent’s figures, and explained in the written description, are of computers, databases, and websites that existed at the time of the invention. It discloses and claims sufficiently definite structure by specifying that functions are performed on a general- or special-purpose computer with specifically configured “computer hardware.”

The ’282 patent explains that “[e]ach of the functional components of the identification and marketing service 340 may be implemented in program code executed by one or more general or special purpose computers.” *E.g.*, ECF No. 42-1 at 3:26-29. It adds that the “identification and marketing service 340 comprises a computing device 342 that comprises a

processor 344 and memory 346.” *Id.* at 3:8-11. A processor and memory are, of course, components of computer hardware. And the ’282 patent discloses several examples of suitable computer hardware over the next two paragraphs. *See id.* at 3:11-25. In the specification and claims, just this sort of computer hardware is configured through software to carry out the novel functions disclosed and claimed by the ’282 patent. Consistent with the specification, Claim 9 of the ’282 patent claims computer hardware, whether general purpose or special purpose, configured to perform specific functions. *See Williamson*, 792 F.3d at 1352.

To this end, the ’282 patent details myriad functional components with supporting diagrams and prose explanation that a skilled artisan could straightforwardly convert into software code to run on the hardware discussed above. *See, e.g.*, ECF No. 42-1 at Fig. 4, Fig. 7, Fig. 8, 8:18-9:25. In fact, the specification even supplies examples of programming code for carrying out particular functions. *See id.* at Fig. 9, 9:26-10:12. While the computer hardware that could execute this code vary, they still correspond to the examples given in the specification as comprising both a processor and memory. This detail is sufficiently specific that a skilled artisan could definitively determine the specific computer hardware needed. *Williamson*, 792 F.3d at 1350; *Biosig Instruments*, 783 F.3d at 1377, 1382-84 (finding a claim not invalid if it apprises “with reasonable certainty, those skilled in the art about the scope of the invention”).

3.3.2. Claim 9 of the ’282 Patent Is Not Indefinite, Even under § 112, ¶ 6

As BigCommerce points out, the prosecution history of the ’358 patent included a rejection of certain claims as subject to § 112(f). *See* Opening Br. at 11. MOV-ology amended its claims to overcome this rejection, replacing the challenged terminology with one of the software structures disclosed in the specification that runs on computer hardware—a “data scraping script.” *See* ECF No. 42-5 at 6. The Examiner accepted this substitution and allowed the claims. Importantly, the Examiner did not object that the specification failed to disclose a “data scraping

script comprising a script embedded in a web page, the data scraping script executing on one or more computer processors, the data scraping script.”

If the Court finds that § 112, ¶ 6 applies, MOV-ology asks the Court to apply the same disclosed structure for the term “computer hardware configured to” that occurred during prosecution of the ’358 patent and that overcame the Examiner’s rejection. In the two-step process of applying § 112(f), this would mean identifying (1) the claimed function as the function set out in the claims and (2) the corresponding structure as a “data scraping script comprising embedded in a web page executing on one or more computer processors.”

Under a means-plus-function approach, the claim terms reflect the “claimed function.” Indeed, BigCommerce has not proposed functions apart from the claim language itself. Opening Br. at 8, 13. With these claimed functions in mind, MOV-ology below identifies where the “corresponding structure” of such a scraping script appears in the specification, explaining how the skilled artisan could understand what the terms claimed. BigCommerce, by contrast, casts aside all alleged means-plus-function terms as indefinite. The sole issue for the Court under this framework is thus “whether the specification adequately discloses a corresponding structure that performs the function associated with the [alleged means-plus-function] limitation[s].” *Noah Sys. Inc. v. Intuit Inc.*, 675 F.3d 1302, 1311 (Fed. Cir. 2012).

3.3.2.1. Step One: The Claims Identify the Claimed Functions

In a hypothetical means-plus-function analysis, the first step of identifying the functions proves easy because the claim language describes the relevant function. For each term, MOV-

ology proposes that the Court use the language already present in the claims, which aligns with the claims and specification.³ The claimed functions appear underlined below:

Term No. 4 Claimed Function	Term No. 5 Claimed Function
computer hardware configured to <u>determine that an electronic form accessed by a user has been abandoned by the user</u> , the	computer hardware configured to <u>obtain data from the abandoned electronic form with the embedded computer-executable instructions by building a data structure based on the abandoned electronic form and parse the data structure to obtain the at least one HTML element</u> ;

3.3.2.2. Step Two: The Specification Supplies Ample Structure

The '282 patent's specification provides a thorough description of the hardware and underlying processing needed for the identification and marketing service. With this foundation, the specification discloses scraping scripts that determine whether forms are incomplete or abandoned and parse data from such forms. For example, the '282 patent explains at a high level that the "identification and marketing service 112 scrapes the visitor data from the incomplete one or more electronic forms and saves the scraped data in the identification and marketing database 110." ECF No. 42-1 at 4:19-23. The specification describes the processes used by the script for these tasks in increasing detail. For instance, the specification teaches that "web-scraping software may automatically recognize the data structure of a webpage, provide a recording interface, provide scripting functions that can extract and transform content, and provide database interfaces that can store the scraped data 348 in databases." *Id.* at 8:30-34.

The specification also identifies by name several techniques for this process that a skilled artisan could employ in various hardware and software environments. For scraping in UNIX

³ BigCommerce does not do the two-step analysis required for § 112(f) claims, instead proposing "Function: claim language" for both terms. Opening Br. at 8. MOV-ology's proposal here appears consistent with BigCommerce's proposal, had BigCommerce done the analysis.

based systems, for example, the specification suggests “text grepping and regular expression matching” that one can accomplish using the “UNIX® grep command or regular expression-matching facilities of programming languages, such as Perl® or Python®.” *Id.* at 8:36-39. For Hypertext Transfer Protocol (HTTP) environments, the patent suggests “sending HTTP GET requests or POST requests to a server to retrieve the contents of that server [to] provide scraped data.” *Id.* at 8:42-44. Similar examples appear for HyperText Markup Language (HTML), vertical aggregation platforms, Document Object Model (DOM) parsing, semantic annotation recognizing, computer vision web-page analyzers, and more. *Id.* at 8:45 to 10:10. To illustrate more, Figure 9 of the '282 patent supplies exemplary object code for such a script:

```

<!-- START CONSUMER-OLOGY SCRIPT --> 902
< script type = "text/javascript" > 904
var mvProtocol = ("https:" == document.location.protocol) ? "https://" : "http://"; 906
document.write (unescape ("%3Cscript src=" +
    mvProtocol + "consumer-ology.com/scripts/_____.js' type='text/javascript'%3E%3C/script%3E"));
</script> 910
<!--END CONSUMER-OLOGY SCRIPT --> 912

```

ECF No. 42-1 at Fig. 9. The specification presents similar disclosures for the determination of abandonment. For instance, the '282 patent discloses using “Node.JS [to] determine whether the visitor 320 is still accessing the website 334 or has left the website 334.” *Id.* at 12:19-23.

Each of these disclosures teaches a skilled artisan how “computer hardware” can be “configured to” perform the claimed functions through software across many hardware and software environments, including general- or special-purpose computers. And these disclosures comfortably surpass the generic processors disclosed and claimed as means by the patents in *Williamson* and related cases. *See, e.g., In re Katz*, 639 F.3d 1303, 1314 (Fed. Cir. 2011) (“[T]he patents at issue disclosed only general purpose processors.”); *EON Corp. IP Holdings LLC v.*

AT&T Mobility LLC, 785 F.3d 616, 621 (Fed. Cir. 2015) (“It is uncontested that the only structure disclosed in the ’757 patent is a microprocessor.”); *Williamson*, 792 F.3d at 1352 (finding that the means required a special purpose computer, but the specification disclosed no such computer or algorithm that could run on a general purpose computer).

BigCommerce incorrectly assumes that the corresponding structure for *all* computer systems must be—and can only be—a software algorithm expressed as a multi-step decision tree. BigCommerce argues that “[w]here claims require a special purpose computer, the specification must disclose corresponding structure in the form of an algorithm.” Opening Br. at 10. BigCommerce cites—but notably does not quote—*Williamson* as supporting this rule. But *Williamson* and its related cases in fact stand for the opposite proposition. They restate the principle that the corresponding structure can be anything that “performs the function associated with the [means-plus-function] limitation” and which the specification “links or associates that structure to the function recited in the claim.”” *Noah Sys.*, 675 F.3d at 1311. Even in the rare times an algorithm is required—“[f]or computer-implemented means-plus-function claims where the disclosed structure is a [general purpose] computer programmed to implement an algorithm”—the algorithm need not be disclosed as a series of steps. It may instead be expressed in “any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure.” *Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1340 (Fed. Cir. 2008) (internal citation omitted). Based on its misreading of precedent, BigCommerce looks only for software code, ignores the specific disclosure of such code, disregards the admitted “pictorial and linguistic recitations of the terms’ functions” that are present, and incorrectly argues a failure of disclosure. See Opening Br. at 10. Similarly, Dr. Lavian does not grapple with MOV-ology’s ample disclosure of how hardware can be

configured through software to perform the claimed functions. He instead disregards the disclosure, looks for the wrong thing, and—not finding that wrong thing—says it is not there.

MOV-ology’s hypothetical means-plus-function analysis follows the Federal Circuit’s instructions to find sufficient structure in the specification based on the function, no matter how that structure is expressed. Should the Court find that BigCommerce has overcome the presumption against means-plus-function claiming, it should construe Claim 9 of the ’282 patent such that the corresponding structure for a “computer hardware configured to” is a “data scraping script comprising embedded in a web page executing on one or more computer processors.”

3.4. “Wherein Obtaining the At Least One HTML Element . . .” (’358 Patent, Claim 20)

MOV-ology disagrees that Claim 20 of the ’358 patent “lacks antecedent basis and is therefore indefinite,” as BigCommerce asserts. Opening Br. at 13.

Term	Claim	Plaintiff’s Proposal	Defendants’ Proposal
“wherein obtaining the at least one HTML element from the incomplete electronic form”	’358 patent, Claim 20	Plain and ordinary meaning	Indefinite

The disputed term refers directly, though in fewer words, to the process in Claim 17 for “obtaining” an “HTML element” via a “protocol,” which “writ[es] a script tag associated with a script file” that is “configured to locate” the HTML element obtained through the protocol:

Claim 20 Disputed Term	Claim 17 Antecedent Basis
wherein obtaining the at least one HTML element from the incomplete electronic form	<u>obtaining a protocol</u> of at least one webpage associated with the incomplete electronic form; writing a script tag associated with a <u>script file</u> to the at least one webpage <u>according to the protocol</u> , the script tag configured to place the script file onto the at least one webpage, the <u>script file configured to locate</u> the at least one <u>HTML element</u> ;

ECF No. 42-5 at 21:8 to 18-21 (emphasis added).

As BigCommerce admits, “[o]btaining a protocol of a webpage is a straightforward and known operation to a POSITA.” Opening Br. at 14. And BigCommerce correctly explains that “the ‘locating’ of the HTML element or abandoned data by the script is a predicate step that must be carried out before the data can be subsequently ‘obtained.’” *Id.* Claim 17 sets out both steps. The “HTML element” is located by a “script file” configured to do so and obtained according to a protocol and its associated script file. Unfortunately or fortunately, these steps are in the formulaic patent-eze of claim language using 60 words. But the fact that these 60 words and two steps are then summarized and recalled with Claim 20, using 14 words expressed as one overall process, does not render that claim indefinite because the referent is apparent. *See Ex parte Porter*, 25 USPQ2d 1144, 1145 (Bd. Pat. App. & Inter. 1992) (holding “controlled stream of fluid” provided reasonable antecedent basis for “the controlled fluid”).

4. Conclusion

For these reasons, MOV-ology asks that the Court construe each disputed term according to its plain and ordinary meaning.

Respectfully submitted,

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By: /s/ Patrick A. Fitch

Karl Rupp
State Bar No. 24035243
krupp@soreylaw.com
Sorey & Hoover LLP
100 North Sixth Street, Suite 502
Waco, Texas 76701
Telephone: 903-230-5600

Robert R. Brunelli (admitted *pro hac vice*)
rbrunelli@sheridanross.com
Matthew C. Holohan (admitted *pro hac vice*)
mholohan@sheridanross.com
Patrick A. Fitch (admitted *pro hac vice*)
pfitch@sheridanross.com

Alex W. Ruge (admitted *pro hac vice*)
aruge@sheridanross.com

Sheridan Ross P.C.
1560 Broadway, Suite 1200
Denver, Colorado 80202
Telephone: 303-863-9700
Facsimile: 303-863-0223
litigation@sheridanross.com

Attorneys for MOV-ology LLC

CERTIFICATE OF SERVICE

I hereby certify that on August 11, 2022, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system which will send notification of such filing to all counsel of record in the above-referenced matter.

/s/ Thomas J. Armento _____

Thomas J. Armento
Paralegal
tarmento@sheridanross.com
SHERIDAN ROSS P.C.
1560 Broadway, Suite 1200
Denver, Colorado 80202
Telephone: (303) 863-9700
Facsimile: (303) 863-0223
Email: litigation@sheridanross.com